

Remarks

Favorable consideration and allowance are respectfully requested for pending claims 1-18 and 69-99 in view of the foregoing amendments and the following remarks.

I. The rejection of claims 1-6, 10-15, 69, 84-93, 94, 96 and 98 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) is respectfully traversed.

The Office Action correctly indicates that Irwin fails to teach “a bar code encoded with data and a first program comprising a plurality of instructions, the plurality of instructions including a conditional instruction, and sending based on the encoded first program.”

Instead, the Office Action offers Keys as teaching these claim limitations.

Keys relates generally to data collection devices, such as bar code scanners. For such devices, Keys provides disclosure regarding two distinct embodiments of data editing systems, namely, the systems that decode the scanned data into a useful format. The first embodiment relates to a specifically configured data editing system for a data collection device as shown in a block diagram in Figure 1A and a physical schematic in Figure 1C. The second embodiment relates to another data editing system that includes both a host processor assembly and a separate data collection device. This embodiment is shown in a block diagram in Figure 1B and a physical schematic is shown in Figure 1D, see col. 2: 34-45 and the related Figures.

As explained in Keys’ specification, and shown in the drawing, the data editing system of Figure 1A includes a data collection device 10 having data editing program 90 and a program selector program 90s. The program selector program 90s configures the device 10 so that “a data editing routine of device 10 varies between a limited number of data editing protocol options, depending on which of a limited number of user-selectable options is selected”, see col. 3: 30-42. Thus, Keys teaches that the program selector program 90s selects one of a number of routines for the data editing program 90 to implement. Further, Keys teaches here that “configuring” means selecting from among already available alternatives. The use of the self-descriptive phrase “program selector program 90s” shows that Keys intends the reader to understand that this program is used to select from among numerous available alternatives.

In contrast, the system of Keys’ Figure 1B includes a host processor assembly 100 that is *in communication with* the data collection device 10. As shown in the drawing and the

specification, the host processor assembly 100 is separate from the data collection device 10. The host processor assembly 100 includes a program builder program 190 which is used by a programmer to develop sets of data editing instructions (programs). The host processor assembly 100 communicates the set of data editing instructions to the data collection device 10, see col. 3: 44-57.

Thus, Keys teaches that to modify the programs available on a data collection device 10 a separate host processor assembly 100 is used with a program builder program 190. This is further shown, for instance, in the paragraph bridging columns 4 and 5 of Keys, which describes the ability of “system 5-2 and program 190 to aid a user in developing highly specific and detailed customized message data editing routines.” Col. 6: 37-43 indicates that “The system architecture shown in FIG. 1b [*sic*] is highly useful in the case that device 10 does not have a keyboard or other hand-actuated user interface, because it allows advanced instructions regarding a desired message data editing protocol to be readily communicated to device 10 by way of hand input data input into host assembly 100.” Again, here Keys teaches that Figure 1B¹ shows how to provide instructions regarding the data editing protocol. Later in this same paragraph, at col. 6: 61 – col. 7: 1, Keys teaches an advantage of using the host assembly 100 to update the program on the data collection device 10, “In addition, the software architecture as shown in FIG. 1b, [*sic*] wherein program builder program 190 is incorporated in a non-integrated host processor assembly 100 **physically separate from** device 10, allows several devices 10 to be configured for data editing according to a certain protocol by installation of program builder program 90 in a single computer system, rather than in several devices” (emphasis added). Thus, Keys teaches that to modify or add to a program, a separate device must be used including a program builder program 190.

Keys then continues to describe reconfiguring data editing software on data collection devices using the host processor assembly 100 of Figure 1B. In particular, Keys’ Figure 2B teaches the use of program builder program 190 and host processor assembly 100 of Figure 1B, see col. 39: 11-14, “An example of an embodiment of the invention wherein program builder program 190 operates to actuate a program write mode of operation for host assembly 100 is

¹ There is no Figure 1b, only 1B – this is one among numerous typographical errors which make understanding Keys difficult if not outright impossible.

described with reference to FIG. 2b.” Thus, Keys describes the conditional instruction such as “IF” and “SEND” as part of writing programs using the program builder program 190 of Figure 1B. It should be understood, that Keys does not describe any ability to update or modify a program except through the use of the host processor assembly 100 of Figure 1B. Notably, this host processor assembly 100 of Figure 1B does not use a bar code to transmit information. Rather, the host processor assembly 100 of Figure 1B is used to build programs to run on the data collection device (bar code reader).

Keys pointedly does not disclose that any program may be provided or transmitted using a bar code. Keys does indicate that a bar code may identify a selection from among several routines that are stored on the data collection device, however there is no indication of an ability to add to or modify the programs that are stored on a data collection device based on a bar code.

The Office Action cites col. 49: 14-18 as relevant to the claim limitations at issue. this sentence reads: “In yet another embodiment of the present invention shown in FIG. 3i the set of instructions to configure the program 90 within the control circuit 40 is communicated to the control circuit 40 by means of an instructional bar code 310 or a set of such bar codes.” This says that a bar code provides instructions *to configure* a program. This language does not say that the bar code represents a program or that the bar code is a program or even that the barcode includes a program. Rather, here, the reference merely teaches that a bar code may provide an instruction to “configure” a program.

At a basic level, the common meaning of the language suggests that Keys did not intend that the bar code would actually provide a program. To further determine the relevance of this passage to the present claims, one must consider exactly what Keys teaches by the phrase “configure the program 90.” There is nothing in Keys to suggest that he contemplated that a bar code would provide a set of executable instructions including a conditional instruction. Rather, Keys teaches that a bar code might be used to cause a device to select from among several sets of instructions that are already present on the device.

Keys suggests that “configure” means to select from among available alternatives. For instance, col. 1: 47-50 state that “The data collection device *is configured* by the program selector program to receive device user inputs via user interface of the device and to convert the user inputs into data editing command instructions.” The use of the self-descriptive program

selector program shows that here the configuring involves merely selecting an appropriate program. The paragraph at col. 3: 30-43 teaches that a device may be “configured” to perform one of a limited number of data editing routines. The paragraph bridging columns 3 and 4 teaches that the device may be “configured” to display different editing options for editing different types of message data.

Further evidence that Keys is referring to selecting from among available alternatives is that the “program” being configured is a data editing program. This is evident from the use of the reference number “90” in the relevant text, which is associated with the “data editing program 90”. The phrase “data editing program 90” appears in the text 18 times. This data editing program is configured into one of a number of data editing protocol options so that when data is fed into the data editing program, the program translates the data into a useful format. The particular format is determined by the selection of the data editing protocol.

In contrast, when Keys discusses modifying a program or providing a new program, Keys always relies on the embodiment of Figure 1B, where the program builder program 190 is used to develop a new program which is then installed in data collection device 10. The sole exception is in col. 49: 47-52 which indicate that a new message data editing routine may be provided using radio frequency communication. This amounts to little more than suggesting that the communications link 305 shown in Figure 1B might be wireless rather than a hard wire. This language does not suggest that instead, a new message data editing routine might be provided in a bar code. Further, the additional language “with new message data editing routines” in the phrase “configured with new message data editing routines” shows that Keys did not consider the word “configured” to include adding something new. Moreover, this paragraph, like all other instances where actual programs are provided, contemplates use of the program builder program of Figure 1B.

This consistent and repetitive use of the word “configured” to mean select from among available alternatives and the consistent and repeated description that modifying or creating a new program requires the use of program builder program 190 and host processor assembly 100 of Figure 1B show that whenever a program with a plurality of instructions including a conditional instruction were to be provided to the data collection device, Keys contemplated doing this with the program builder program 190 and host processor assembly 100.

Further, the last sentence appearing in the paragraph relied on in the Office Action shows that Keys contemplated that the bar code could only convey a simple selection of already existing set of instructions. In particular, col. 49: 21-25 reads: "Processor Assembly 100 or device 10 if equipped with a symbology encoder 115, which are well known, can be configured to encode instructional symbol 310 after a set of data editing instructions is built using program builder 190." This says that first, a set of data editing instructions is built using program builder 190 (again from the embodiment of Figure 1B) and then a symbol may be used to identify a selection of the particular set of data editing instructions. There is no disclosure that the symbol may actually be the set of data editing instructions. Rather, all that is described is that symbol may identify the set of data editing instructions.

There is simply no disclosure anywhere in Keys that supports the notion that Keys actually contemplated that a bar code might be used to convey a program, as is contemplated by the present claims. Although Keys does disclose modify or adding to the program(s) available on a data collection device, Keys limits this discussion to the use of the program builder program 190 and host processor assembly 100 of Figure 1B. Every time Keys refers to a transmission of a set of instructions, Keys is referring to the embodiment of Figure 1B. As such, Keys' teachings lack support for the notion that a bar code might be used to provide a set of instructions to a reader. Absent such support, Keys cannot be properly relied on to reject the present claims.

Keys teaches merely that a barcode provides a selection for a set of data processing instructions that are already present in the reader. Keys does not teach or even contemplate that a program comprising a plurality of instructions including a conditional instruction might be provided in a bar code.

For claim1, the actual claim language at issue is:

reading, at a terminal, a barcode encoded with data and a first program comprising a plurality of instructions, the plurality of instructions including a conditional instruction, wherein the barcode is included on the ticket;

based on the encoded first program and responsive to execution of the conditional instruction, sending the data and a trigger to execute a check validity program to validate the data

Even assuming, *arguendo*, that Keys' suggestion that a bar code might provide a selection of a set of data editing instruction were read broadly, such selection does not amount to

a plurality of instructions, nor does such a selection include a conditional instruction. Accordingly, any sending of data and a trigger cannot be “based on the encoded first program **and responsive to execution of the conditional instruction**” as is required of the claim. Further, the recent Office Action does not appear to consider whether or not the sending is responsive to a conditional instruction.

Accordingly, the proposed combination of references does not teach or suggest each and every element of the claimed invention and the obviousness rejection cannot be properly maintained. Reconsideration and withdrawal thereof are respectfully requested.

II. The rejection of claims 74, 78 and 82 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) and further in view of Poland (U.S. 4,825,058) is respectfully traversed.

III. The rejection of claim 7 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) and further in view Saunders et al. (U.S. 6,340,331) is respectfully traversed.

IV. The rejection of claims 8, 9, 16, 17, 18, 70 and 71 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) and further in view Axelrod et al. (U.S. 5,337,358) is respectfully traversed.

V. The rejection of claims 72, 73, 75-77, 79-81 and 83 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) and further in view of Meyer et al. (U.S. 6,915,271) is respectfully traversed.

VI. The rejection of claims 95, 97 and 99 under 35 U.S.C. §103(a) over Irwin, Jr. et al. (U.S. 5,471,039) in view of Keys (U.S. 6,758,403) and further in view of Wilz (U.S. 6,152,369) is respectfully traversed.

In each of these rejections (II-VI), Keys is relied on as teaching “a bar code encoded with data and a first program comprising a plurality of instructions, the plurality of instructions including a conditional instruction, and sending based on the encoded first program.” However, as discussed above, Keys does not provide any teaching or suggestion that a bar code may provide anything beyond an indication of a selection from among pre-existing options. None of the other cited references make up for the deficiencies of Keys. Accordingly, the proposed

combinations of prior art do not teach or suggest each and every element of the claimed invention and reconsideration and withdrawal of these rejections are respectfully requested.

CONCLUSION

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

In the event that any further fees are due, please apply any charges or credits to deposit account 50-3211 referencing Attorney Docket No. 21204.0166US.

Respectfully submitted,

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